## PATENT SPECIFICATION



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#### PROVISIONAL SPECIFICATION.

No. 25,140, A.D. 1929.

# A New or Improved Means of Packing Cigarettes, Cigars, or the like.

I, HAROLD ROUND, a Subject of the King of Great Britain, of 141, Great Charles Street, Birmingham, in the County of Warwick, do hereby declare the nature of this invention to be as follows:—

This invention relates to a new or improved means of packing cigarettes, cigars, or the like and the object of the invention is to provide a hygienic packing which will prevent access of dust to the cigarette or the like and the contamination of the latter in other ways.

According to this invention I provide a separate airtight packet or container for each cigarette or cigar.

According to another feature of this invention I provide airtight packets or containers for cigarettes or cigars.

According to another feature of this invention I provide a number of said packets or containers and detachably connect them together.

According to another feature of the invention a number of said packets or containers are carried and/or formed partially or wholly by a flexible member or sheet having means for facilitating the removal of a packet or container from the said flexible sheet or member as desired.

According to another feature of the invention, the packets or containers are disposed in end to end, or side by side, or end to end and side by side relationship.

According to another feature of the invention, the packets or containers are connected together by parts perforated or equivalently formed to facilitate the tearing off of one packet from the rest

ing off of one packet from the rest.
According to another feature of the invention the packets are formed by one or more sheets of suitable flexible material made into tubular form, or two or more sheets of flexible material placed and secured together.

The packing may be in the form of grease proof paper.

Further features of this invention will become apparent as this specification proceeds.

According to a convenient embodiment of this invention I provide two strips of grease proof paper or other medium which will prevent the passage of air and contaminatinng substances through it and I place these strips of paper one upon the other. The strips of paper are secured together along their longitudinal edges and are also secured together along spaced transverse lines, one of the sheets being flat and the other sheet being corrugated or made sinuous in longitudinal cross section so that when this sheet is secured to the flat sheet as described there are provided a number of airtight compartments into each of which is adapted to be placed a cigarette, cigar or the like.

The compartment may be partially completed and left open at one end, the cigarette being then placed in position; or the cigarettes can be fed on to the flat sheet in spaced relationship, the other sheet being then placed over the cigarettes and secured to the flat sheet so as to enclose the cigarettes in air-tight compartments. Instead of making one sheet flat and the other corrugated both sheets may be corrugated.

Perforations or the equivalent are provided transversely of the sheet between each compartment so that a compartment and its contents can be torn off from the rest as desired.

In the arrangement described the cigarettes are arranged in side by side relationship.

If desired the cigarettes may be arranged in end to end relationship and in one such arrangement a comparatively long strip of suitable paper such as grease proof paper is formed into a tube by having its longitudinal edges joined

together cigarettes are enclosed in this tube in spaced and end to end relationship and the tube is closed at spaced points in its length so that a number of separate air tight compartments are provided in each of which is a cigarette. Perforations may be provided at the closed part of this tubular member so as to facilitate the separation of a compartment and 10 its enclosed cigarette from the rest.

In a further modified arrangement in which the cigarettes are arranged in end to end relationship, the tubular member may be formed from a pair of comparatively long strips placed one upon the other and joined together in an air tight manner along their longitudinal edges at their ends and at spaced points intermediate their ends to provide a number of 20 air tight compartments in which eigar-

ettes are enclosed. This arrangement may also be provided with perforations.

The compartments, packets, or containers may be formed of any suitable material, of any desired size and shape. 25 and the various packets or containers may be disposed on the sheet in any suitable arrangement which provides the necessary compactness.

In adapting this invention say to a 36 twenty-packet of cigarettes, the cigarettes would be attached to a band at one end.

Dated the 7th day of August, 1929.
FORRESTER, KETLEY & Co.,
Chartered Patent Agents,
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Birmingham, and
Jessel Chambers, 88/90, Chancery Lane,
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#### PROVISIONAL SPECIFICATION.

No. 12,147, A.D. 1930.

### A New or Improved Means of Packing Cigarettes, Cigars, Tobacco, or the like.

I, HAROLD ROUND, a Subject of the King of Great Britain, of 141, Great Charles Street, Birmingham, in the County of Warwick, do hereby declare the nature of this invention to be as follows:—

This invention relates to a new or improved means for packing cigarettes, cigars, or the like and the object of the invention is to provide a hygienic packing which will prevent access of dust to the cigarette or the like and the contamination of the latter in other ways.

According to this invention I provide a separate airtight packet or container for each cigarette or the like.

According to a further feature of the invention I provide a series of packets or containers in end to end relation or in end to end and side by side relation.

According to a further feature of this invention I provide a rapid opening 55 means facilitating the removal of the container or packet from the cigarette, cigar or the like.

According to a still further feature of the invention the rapid opening means 60 comprises a length of cotton, or other suitable material, fastened by one end in a suitable manner to the one end of the packet or container for the cigarette, cigar or the like and passing from the 65 inside of the packet to the outside thereof so that when the packet has been sealed up to enclose a cigarette, or the like, the

packet can be readily opened by taking hold of the outside end of the piece of cotton and pulling on this, thereby causing the cotton to tear or cut the packet so as to permit of the cigarette being taken therefrom. Conveniently the cotton may extend longitudinally from one end of the packet to the other but 75 alternatively it might be arranged circumferentially of the packet or spirally thereof.

According to another feature of this invention I provide a number of packets or containers for cigarettes, cigars or the like detachably connected together.

According to a still further feature of the invention a number of the said packets or containers are carried by and/or formed partially or wholly by a flexible member or sheet having means for facilitating the nemoval of a packet or container from the sheet as desired.

The packets or containers may be formed by one or more sheets of suitable flexible material such as paper made into tubular form, or two or more sheets of such flexible material placed or secured together with one or more corrugations in each so as to form one or more or a series of tubes, perforations being provided if desired between each of these tubes to facilitate tearing the tubes off from one another. The ends of the tubes may be closed hermetically in any desired manner.

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In carrying this invention into practice it is convenient to form each packet or container as a tube made from a strip of paper rolled along an axis parallel to its longitudinal edges and having its edges secured together by an adhesive. tube is hermetically joined at both ends and one end of a piece of cotton is firmly connected to one end, or to any other 30 suitable part, of the packet and extends longitudinally of, or along the side of the packet and projects from the end of the packet opposite to that to which it has one end secured.

To rem. ve a cigarette or the like from the packet or container, all that it is necessary to do is to hold the packet in one hand and pull the projecting cotton with the other hand, this causes the 20 packet to be torn or cut longitudinally and so opens the packet and the cigarette or the like can be removed easily.

The packets may be manufactured in any suitable manner and may be partially 25 prepared before the cigarettes or the like are placed in them, or the paper or material from which the packets or containers are formed may be fed into a machine in strip form, the machine automatically feeding cigarettes at required times on to the strip which is in turn cut and rolled around the cigarette, the necessary lengths of cotton being suitably inserted during these operations, and the 35 ends and edges of the packet being then hermetically sealed.

If desired a number of the packets having the rapid opening means described may be mounted together on a sheet of 40 paper or other material in side by side, or end to end, or side by side and end to end relationship and these packets may be mounted on or associated with such sheet in a manner such that they are readily 45 detachable.

If desired the packets or containers may be made by placing two strips of paper

one upon the other, the strips being secured together along their longitudinal edges and also along spaced transverse 50-lines, one or both of the sheets being corrugated or made sinuous in longitudinal cross section so that when the sheets are secured together there are provided a number of airtight parallel compartments in one or more rows into each of which is adapted to be placed a cigarette, cigar or the like. Perforations or the equivalent may be formed between each of the packets.

If the cigarettes are to be arranged in end to end relationship the packets may be formed by a comparatively long strip of suitable paper formed into a tube and having its longitudinal edges joined 65 together, cigarettes being enclosed in this tube in spaced end to end relationship and the tube being closed at spaced points in its length between the ends of the cigarettes, and in this case if desired, one piece of cotton may extend the whole length of the tube so that all the individual packets can be opened by the same cotton, or a separate cotton may be provived for each packet or container or for groups of packets or containers. Tearing strips may be used in all cases instead of cotton if desired Perforations may be provided between the compartments to facilitate the separation thereof.

A series of end to end packets may be formed by placing two strips one upon the other and joining their longitudinal edges and also joining them at their ends and along spaced intermediate transverse

Dated the 7th day of February, 1930. FORRESTER, KETLEY & Co., Chartered Patent Agents, Central House, 75, New Street,

Birmingham, and Jessel Chambers, 88/90, Chancery Lane, London, W.C. 2.

#### COMPLETE SPECIFICATION.

# A New or Improved Means of Packing Cigarettes, Cigars, or the

I, HAROLD ROUND, a Subject of the King of Great Britain, of 141, Great Charles Street, Birmingham, in the 90 County of Warwick, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:-

This invention relates to a new or improved means of packing cigarettes or

cigars, and the primary object of the invention is to provide a new or improved hygienic packing which will prevent access of dust to the cigarette or cigar and 100 contamination thereof in other ways.

A further object of the invention is to provide a packing of this kind which will take up a minimum of space when a number of the said tobacco articles are packed 405 With the above objects in view, according to the invention the improved packing for cigarettes or cigars comprises a plurality of substantially cylindrical airtight and hermetically sealed packets or envelopes, each formed from a single sheet of paper with a single longitudinal joint or seam and adapted to contain a single article, and an outer container for said packets or envelopes. The individual packets may be associated together either directly or with the aid of auxiliary means.

I am aware that it has been proposed to pack cigarettes in parallel side by side relationship between two or more sheets of flexible material stuck together so as to provide a plurality of dust and airtight chambers or compartments in each of 20 which is placed one cigarette, perforations usually being provided in the sheets between each compartment so as to facilitate one cigarette at a time being torn from the sheet. Also in such arrangements, it is known to provide a tearing thread or strip.

Also it is known to pack cigars in closable, but not airtight, envelopes connected together in a detachable manner or 30 mounted on a tearable connecting strip and arranged in side by side relationship. Further it has been proposed to pack medicinal tablets and similar small articles in an airtight manner by enclos-35 ing them in spaced relation in a strip of flexible material folded over lengthwise to form a tube and sealed between each pair of articles, all the small compartments so formed being non-cylindrical and 40 provided in the same continuous tubular strip and thereby connected together by the strip itself.

It has also been proposed to enclose cigars in single envelopes made of a compound sheet of tin foil on the inside and paper on the outside, the paper being sealed at the ends and also along a single longitudinal seam.

In order that my invention may be 50 clearly understood and more readily carried into practice, I have appended hereunto one sheet of drawings illustrating the same, wherein:—

Figure 1 is a perspective view of a 55 cigarette packing or envelope according to one form of this invention.

Figure 2 is a perspective view showing the method of placing the packing or envelope around a cigarette.

Figure 3 is a perspective view of a similar packing or envelope to that shown in Figure 1 but including a tearing thread.

Figure 4 shows a similar packing or 65 envelope to that included in Figures 1 and

3 but in this case the packing is provided with a tearing strip instead of a tearing thread.

Figure 5 is a perspective view of a pair of envelopes placed in end to end relation-

Figure 6 is a plan of a series of pairs of cigarette envelopes such as are shown in Figure 5 arranged in side by side relationship and connected to a supporting or 75 carrying strio.

Figure 7 is an end elevation showing in a folded position the cigarette envelopes illustrated in Figure 6.

Figure 8 is a similar view to Figure 6 80 with the exception that the supporting strip is differently placed.

Figure 9 is a plan of a series of separate cigarette packings such as are shown in Figure 1 mounted upon a backing sheet 85 in staggered relationship.

Figure 10 is a part plan and part perspective view of a bunched arrangement of cigarette envelopes.

Referring to Figures 1 and 2, 1 is a cigarette envelope which is formed from a strip of suitable material such as grease and damp proof paper which is transparent or not as desired, in which the cigarette 2 is rolled substantially as indicated in Figure 2, the longitudinal edge 3 of the envelope being secured by a suitable adhesive to the rest of the envelope after the rolling operation is completed.

An adhesive is provided in the ends 4 100 of the cigarette envelope and these ends are flattened and secured by the adhesive so that they assume a shape somewhat as indicated at 5—5 in Figure I. The longitudinal joint 3 of the wrapper and 105 the joints at the ends are air-tight and dust proof and form a hermetic seal for

the cigarette envelope.

Figure 3 shows an envelope very similar to that described with reference to 110 Figures 1 and 2, but in this case a tearing thread 6 is provided which extends longitudinally down the inside of the envelope, the thread being adapted to project at one end of the envelope and 115 being anchored at 7 to the other end of the envelope. Or if desired the thread could project at both ends of the envelope.

To open the envelope shown in Figure 120 3, it is only necessary to pull upon the thread 6 and the latter tears the envelope longitudinally and exposes the cigarette contained by the envelope.

The envelope shown in Figure 4 is 125 similar to that shown in Figure 3 except that the tearing thread 6 is replaced by a tearing strip 8 which is stuck or otherwise secured to the outside of the envelope as shown and is provided with a tab or 130

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loose end 9 by which a person may pull on Instead of having a tearing strip 8 secured to the envelope, the strip could be formed by providing two spaced 5 longitudinally disposed weakening lines along the envelope and providing a small tub of any suitable form at one end of the strip between the weakening lines.

In Figure 5 is shown two envelopes sub-10 stantially the same as those illustrated in any of Figures 1, 3 and 4 placed together in end to end relationship. In this case, the cigarette envelope may be made separately and stuck or otherwise secured 15 together by adjacent ends or the two envelopes may be formed from a single sheet or strip of paper rolled substantially as described with reference to Figure 2, a flattened or sealed part 10 being pro-20 vided between the packets which serves to seal the inner ends of both packets. One or more rows of perforations 11 may be provided across the flattened or sealed part 10 to facilitate separation of the two 25 envelopes.

If desired more than two cigarette envelopes 1 may be arranged in end to end

relation.

Each envelope may be provided with a 30 separate tearing thread 6 or with a tearing strip 8 or one tearing thread 6 may serve for two or more end to end enve-

lopes.

In Figure 6 is shown a batch of cigar-35 ette envelopes arranged in end to end relationship as shown in Figure 5 disposed in side by side relationship. These pairs of end to end cigarette envelopes are disposed in spaced side by side relationship 40 by connecting them to a supporting or carrying strip or backing 12 by their centre flattened or sealed parts 10 through the medium of strips of adhesive 13. Instead of having one row of perforations 45 11, two rows of perforations 11 may be provided as shown in each of the sealed or flattened parts 10 of the pairs of end to end envelopes. This arrangement enables the cigarettes to be folded up or down so 50 as to lie adjacent one another as shown clearly in Figure 7, and such an arrange-ment permits of the cigarettes being readily packed in an outer casing, as, for example, 14. Tearing strips or threads may be provided or not as desired in this arrangement.

Figure 8 shows a very similar arrangement to that illustrated in Figure 6 with the exception that the carrying or sup-60 porting strip or backing 12 is disposed at one end of the pairs of envelopes as shown instead of at the centre of the pairs of envelopes as illustrated in Figure 6.

Perforations 15 may be provided to 65 facilitate the removal of the cigarettes from the backing or supporting strip 12.

Figure 9 shows another arrangement of the cigarette envelopes in which the envelopes are arranged in staggered side by side relationship. These cigarette envelopes may be secured to a backing or supporting strip 12 indicated in dotted lines or to a backing or supporting strip or sheets 16 of considerably larger dimensions than the strip 12. In the case where 75 the cigarettes are secured to a backing strip 12, they are so secured by their inner ends, and perforations 11 may be provided to facilitate their removal from the strip. Where the cigarettes are secured to a 80 large backing sheet 16 they may be so secured by their ends or along their whole length by an adhesive or other suitable means, preferably means such that the cigarettes are capable of ready removal 85 from the sheet.

An arrangement such as is shown in Figure 9 enables cigarettes to be folded somewhat as illustrated in Figure 7 but so that the cigarettes when folded only 90 occupy a thickness equal to approximately the thickness of one cigarette instead of a thickness slightly greater than two cigarettes as in the case of cigarettes arranged as shown in Figure 7.

Figure 10 illustrates a still further arrangement of pairs of, or single, cigarette envelopes. Conveniently a number of pairs of cigarette envelopes arranged in end to end relation as shown in Figure 100 5 are connected together by their centre sealed or flattened portions 10 so that in plan they form a number of equally spaced arms radiating from a common centre.

It should be understood that separate 105 cigarette envelopes may be arranged in this manner instead of cigarettes arranged in pairs in end to end relationship.

If single cigarettes are arranged in this way, they might be secured by their ends 110 to a circular, square, or other disc or sheet of cardboard or other material, and in the arrangement shown in Figure 10 or modifications thereof, the cigarettes are adapted to be raised into a substantially 415 vertical position and packed into a cylindrical or other suitable container of substantially small diameter or breadth, and of a height slightly greater than the length of the cigarette envelopes.

It will be understood that in any or all of the collective arrangements of cigarette envelopes described, tearing threads or strips may be employed in any or all of the cigarette envelopes.

If desired more than one sheet of material may be used for each envelope, and such material may be a suitable paper or sheet metal foil or the like.

The cigarettes may be packed by suit- 130

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able machinery, conveniently a strip of paper or material being fed into a machine, the strip being provided in the proper places with adhesive by the 5 machine or previously, the paper or material being then rolled around the cigarette and cut to the required length or first cut and then rolled around the cigarette, the necessary lengths of cotton or tearing strips when used being secured in position during this operation and the ends and edges of the envelope being then hermetically sealed.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed. I declare that what I claim is:—

1. A packing for cigarettes or cigars comprising a plurality of substantially cylindrical airtight and hermetically sealed packets or envelopes, each formed from a single sheet of paper with a single longitudinal joint or seam and adapted to contain a single article, and an outer container for said packets or envelopes.

2. A packing according to claim 1, wherein a number of the individual packets or envelopes are associated to30 gether in series in end to end relation-

ship.
3. A packing according to claim 1 or 2, wherein the individual packets or envelopes, or the series of end to end packets 35 or envelopes, are associated together by

auxiliary means.

4. A packing according to any of the preceding claims, wherein each envelope is provided with a tearing strip or string

40 for opening purposes.

5. A packing according to any of the preceding claims, wherein each envelope or packet, or each end to end associated series, is separately formed from a single 45 strip or sheet of material rolled or other-

wise given for the main part of its length a cylindrical form.

6. A packing according to any of the preceding claims, wherein the individual packets or envelopes, or series of end to end packets or enevlopes, are attached at their ends to a transverse supporting strip, but are otherwise free from each other along their length.

7. A packing according to any of the preceding claims 2 to 5 inclusive, wherein the packets or envelopes are attached in end to end relationship to a transverse supporting strip, so as to extend on opposite sides thereof, but are otherwise free from each other along their lengths.

8. A packing according to any of the preceding claims, wherein associated packets or envelopes are connected together or to the supporting strip in a 65

readily detachable manner.

9. A packing according to any of the preceding claims, wherein a number of pairs of packets or envelopes associated together in end to end relationship are connected together between the packets of each pair.

10. A packing according to claim 1, wherein the packets or envelopes are individually mounted on a backing or attachment sheet by means of their ends in end

to end staggered relationship.

11. A packing for cigarettes or cigars substantially as herein described and as illustrated in Figures 1 and 2, or 3, or 4, or 5, or 6 and 7, or 8, or 9, or 10 of the annexed drawings.

Dated the 14th day of May, 1930.
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